

PATENT COOPERATION TREATY

SEP 1 7 2003

From the INTERNATIONAL SE	ARCHING AUTHORITY		FIS	SH & RICHARDSON, P.C
To: ANITA L. MEIKLEJOHN FISH & RICHARDSON, P. C. 225 FRANKLIN STREET BOSTON, MA 02110-2804	Sy Prectice XUNLEPOAR Spn 11 19nan 17.115	NOTIF	PCT ICATION OF TRAN TERNATIONAL SEA OR THE DECLAR	ISMITTAL OF ARCH REPORT
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949 1998	Am I		(PCT Rule 44.1	.)
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Applicant's or agent's file reference 14184-009WO1	•	FOR FURTHER	ACTION See paragra	phs 1 and 4 below
International application No. PCT/US02/32248		International fili (day/month/year		9.10.2002)
Applicant MICROBIA, INC.	· · · · · · · · · · · · · · · · · · ·		· :	
Filing of amendments and The applicant is entitled, if When? The time limit international internatio	tified that the international search d statement under Article 19: f he so wishes, to amend the clain it for filing such amendments is r search report. e International Bureau of WIPO,	ms of the internation	nal application (see Rule of transm	46):
1211 Geneva	20, Switzerland, Facsimile No.: ructions, see the notes on the acc	(41-22) 740.14.35		
2. The applicant is hereby no	tified that no international search		elished and that the declar	ration under
3. With regard to the protes	st against payment of (an) addition	onal fee(s) under Ru	le 40.2, the applicant is r	notified that:
applicant's request to	vith the decision thereon has been o forward the texts of both the pr	otest and the decisi	on thereon to the designa	ted Offices.
no decision has been	made yet on the protest; the appl	icant will be notifie	d as soon as a decision is	s made.
4. Reminders				
Shortly after 18 months from the applicant wishes to avoid or postporeach the International Bureau apreparations for international publications.	oone publication, a notice of with us provided in Rules 90 bis.1	ndrawal of the inter	national application, or o	f the priority claim, must
Within 19 months from the price examination must be filed if the a (in some Offices even later); otherwise into the national phase before	applicant wishes to postpone the erwise the applicant must, with	entry into the natio	nal phase until 30 mont	hs from the priority date
In respect of other designated Off				
See the Annex to Form PCT/IB/3 Volume II, National Chapters and	301 and, for details about the app the WIPO Internet site.	olicable time limits,	Office by Office, see th	e PCT Applicant's Guide,
Name and mailing address of the ISA/U Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-14	jso	David /	Lambertson vine No. (703) 308-0196	whence for
Facsimile No. (703)305-3230 Form PCT/ISA/220 (April 2002)	Docketed By Billin	g Secretary		re notes on accompanying sheet)
	Duc Date: 15	(1.00		

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: ANITA L. MEIKLEJOHN	PCT
FISH & RICHARDSON, P. C. 225 FRANKLIN STREET BOSTON, MA 02110-2804	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION
	(PCT Rule 44.1)
	Date of Mailing (day/month/year) 15 SEP 2003
Applicant's or agent's file reference 14184-009WO1	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/US02/32248	International filing date (day/month/year) 09 October 2002 (09.10.2002)
Applicant MICROBIA, INC.	05 October 2002 (05.10.2002)
The applicant is hereby notified that the international sear	ch report has been established and is transmitted herewith.
Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the cla	
When? The time limit for filing such amendments is international search report.	normally two months from the date of transmittal of the
Where? Directly to the International Bureau of WIPO 1211 Geneva 20, Switzerland, Facsimile No	D, 34, chemin des Colombettes .: (41-22) 740.14.35
For more detailed instructions, see the notes on the a	;
2. The applicant is hereby notified that no international search Article 17(2)(a) to that effect is transmitted herewith.	ch report will be established and that the declaration under
3. With regard to the protest against payment of (an) addit	ional fee(s) under Rule 40.2, the applicant is notified that:
the protest together with the decision thereon has been applicant's request to forward the texts of both the protest together.	en transmitted to the International Bureau together with the protest and the decision thereon to the designated Offices.
no decision has been made yet on the protest; the app	plicant will be notified as soon as a decision is made.
4. Reminders	
applicant wishes to avoid or postpone publication, a notice of wit	nal application will be published by the International Bureau. If the thdrawal of the international application, or of the priority claim, must and 90 bis.3, respectively, before the completion of the technical
examination must be filed if the applicant wishes to postpone the	of some designated Offices, a demand for international preliminary e entry into the national phase until 30 months from the priority date hin 20 months from the priority date, perform the prescribed acts for
In respect of other designated Offices, the time limit of 30 month	ns (or later) will apply even if no demand is filed within 19 months.
See the Annex to Form PCT/IB/301 and, for details about the ap Volume II, National Chapters and the WIPO Internet site.	oplicable time limits, Office by Office, see the PCT Applicant's Guide,
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commercial for Patents	Authorized officer Jaulance for David A. Lambertson

P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230 Form PCT/ISA/220 (April 2002)

(See notes on accompanying sheet)

Telephone No. (703) 308-0196

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's 14184-009WO1	file reference	FOR FURTHER ACTION	see Notific (Form PC) below.	ation of Transmittal Γ/ISA/220) as well as	of International Search Report s, where applicable, item 5
International application PCT/US02/32248	· · · · · · · · · · · · · · · · · · ·	International filing date (day/mon 09 October 2002 (09.10.2002)	th/year)	(Earliest) Priorit 09 October 2001	y Date (day/month/year) (09.10.2001)
Applicant MICROBIA, INC.					
applicant according to	Article 18. A copy	prepared by this International S y is being transmitted to the Inte	earching A	Authority and is to Bureau.	ransmitted to the
This international sear		of a total of sheets. by a copy of each prior art docu	ment cited	d in this report.	
Basis of the Report a. With regard language in	i to the language, th	ne international search was carried unless otherwise indicated under	out on the	e basis of the inter	national application in the
Authority b. With regard	(Rule 23.1(b)). I to any nucleotide a	carried out on the basis of a transf and/or amino acid sequence disc asis of the sequence listing:			
		application in written form.			
	ther with the interna	ational application in computer re	adable for	m.	
furnished furnished the states	subsequently to this	s Authority in written form.			
furnished	subsequently to this	s Authority in computer readable	form.		
internatio		uently furnished written sequence iled has been furnished.	listing do	es not go beyond t	he disclosure in the
the states been furn		ation recorded in computer reada	ble form is	identical to the w	ritten sequence listing has
2. Certain	claims were found t	unsearchable (See Box I).			
	invention is lacking	g (See Box II).			
4. With regard to th		itted by the applicant			
	••	itted by the applicant. by this Authority to read as follo	ws:		
5. With regard to th	e abstract,				
the text i	s approved as submi	itted by the applicant.			
the text l may, wit Authorit	hin one month from	, according to Rule 38.2(b), by the date of mailing of this interm	nis Authori ational sea	ity as it appears in arch report, submi	Box III. The applicant t comments to this
6. The figure of the	drawings to be pub	lished with the abstract is Figure	No	_	
as sugge	sted by the applicant	ı.		\bowtie	None of the figures
because	the applicant failed t	o suggest a figure.			
because	this figure better cha	aracterizes the invention.			

	PCT/US02/32248	
INTERNATIONAL SEARCH REPORT	·	
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Continuation of B. FIELDS SEARCHED Item 3:		
WEST, STN, COMMERCIAL DATABASES		•
Search terms: Inventors, SEQ ID NO: 91, lovE, Aspergillus		
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Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/32248

USCL: 435/183 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/183 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. A US 6.391,583 BI (HUTCHINSON et al) 21 May 2002 (21.05.2002); see entire document. 1-72 A WO 02/24865 A2 (MICROBIA, INC.) 28 March 2002 (28.03.2002); see entire document. 1-72 **Special categories of cited documents: """ **Counters which may horse doubs on priority claint(s) or which is cited to establish the priority claint(s) or which is cited to establish the policiation date for another citation or other special reason (as specified) priority and the policiation date for another citation or other special reason (as specified) and the policiation date for another citation or other special reason (as specified) and the policiation date for another citation or other means document referring to an oral disclosure, use, colibition or other means **Counters repulsible priority to the literational filing date to literate to involve an invention cannot be considered to involve an invention
According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/183 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please Sec Continuation Sheet C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. A US 6,391,583 B1 (HUTCHINSON et al) 21 May 2002 (21.05.2002); see entire document. 1.72 A WO 02/24865 A2 (MICROBIA, INC.) 28 March 2002 (28.03.2002); see entire document. 1.72 * Special categories of cited documents * The document of felling the general state of the art which is not considered to be of particular relevance. * Special categories of cited documents * The document of particular relevance; the claimed invention cannot be considered in the publication due of another claim on other special reason (as specified) or which is sixed to establish the publication due of another claim on other special reason (as specified) or which is clied to establish the publication due of another claim on other special reason (as specified) or which is such to considered to involve an invention cannot be considered in other than the considered to involve an invention cannot be considered in other than the considered on the publication of particular relevance; the claimed invention cannot be considered in other than the considered on the cons
Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/183 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. A US 6,391,583 B1 (HUTCHINSON et al) 21 May 2002 (21.05.2002); see entire document. 1-72 A WO 02/24865 A2 (MICROBIA, INC.) 28 March 2002 (28.03.2002); see entire document. 1-72 * Special categories of cited documents: A* document defining the general state of the an which is not considered to be of particular relevance: ** Special categories of cited documents: A* document defining the general state of the an which is not considered to be of particular relevance: ** series application or patent published on or after the international filing date or priority claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication date of another claim(s) or which is clied to establish the publication or patent published on or other means to considered to involve an inventive step when the document is taken alone "Y" document referring to an oral di
Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/183 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. A US 6,391,583 B1 (HUTCHINSON et al) 21 May 2002 (21.05.2002); see entire document. 1.72 A WO 02/24865 A2 (MICROBIA, INC.) 28 March 2002 (28.03.2002); see entire document. 1.73 See patent family annex. 1.74 document defining the general state of the art which is not considered to be of particular relevance. 2.75 document defining the general state of the art which is not considered to be of particular relevance. 2.76 document of particular relevance: the claimed invention cannot be considered on the publication date of another citation or other special reason (as specified) on other means of the considered to involve an invention cannot be considered on the publication date of another citation or other special reason (as specified) on other means to be considered to be onsolved an invention cannot be considered on the publication date of another citation or other special reason (as specified) on other means to be considered to involve an invention cannot be considered to deviate the publication date of another citation or other special reason (as specified) on other means to be considered to be onsolved to involve an invention cannot be considered to deviate the publication of the of another citation or other special reason (as specified) on the art.
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. A US 6,391,583 B1 (HUTCHINSON et al) 21 May 2002 (21.05.2002); see entire document. A WO 02/24865 A2 (MICROBIA, INC.) 28 March 2002 (28.03.2002); see entire document. 1-72 * Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance ** Special categories of cited documents: ** and document defining the general state of the art which is not considered to be of particular relevance ** ** Special categories of cited focuments: ** ** ** Special categories of cited focuments: ** ** ** ** ** ** ** ** ** ** ** ** **
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. A US 6,391,583 B1 (HUTCHINSON et al) 21 May 2002 (21.05.2002); see entire document. 1-72 A WO 02/24865 A2 (MICROBIA, INC.) 28 March 2002 (28.03.2002); see entire document. 1-72 * Special categories of cited documents: "1" therefore the continuation of Box C. See patent family annex. the continuation of particular relevance of particular relevance, the claimed invention cannot be considered only an oral disclosure, use, exhibition or other special reason (as specified only of continuation of the an oral disclosure, use, exhibition or other means
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priority date claimed
Date of the actual completion of the international search Date of mailing of the international search report
16 June 2003 (16.06.2003)
Name and mailing address of the ISA/US Authorized officer
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Mail Stop PCT, Attn: ISA/US
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. (703) 308-0196

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty and of the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be complained that, since all parts of the international application (claims, description and deswings) may be amended during the international preliminary examination procedure, there is usually no used to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

The claims only.

The description and the drawings may only be amended during international preliminary examination under Chapter II.

When ? Within 2 menths from the dete of transmittal of the international centch report or 16 months from the priority data, whichever time limit expires later. It should be noted, however, that the assentments will be considered as larving been received on time if they are received by the international Deves other the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to the the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/a filed, see below.

How? Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A suplectment short must be submitted for each short of the claims which, on account of an amendment or amendments, differs from the short originally filed.

All the claims appearing on a replacement abort must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

What documents must/may accompany the amendments ?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confounded with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged.
- (ii) the claim is cancelled;
- (iii) the dam is new;
- (iv) the claim replaces one or more dia mu as filed.
- (v) the date is the result of the division of a date to fired